AMENDMENTS TO THE CLAIMS

Claims 1-25 (Cancelled)

26. (New) An optical connector for establishing a connection to a complementary mating connector that has a complementary optical terminal element, in particular for establishing multimedia-connections in a vehicle, comprising:

a connector housing for mating connection with said complementary connector and including a mating receptacle, and

at least one optical terminal element including at least one fiber receiving sleeve that has a front side and a rear side that are connected by walls forming a channel which defines an optical axis and includes clamping elements,

said optical terminal element being adapted for mating connection with said complementary optical terminal element of said complementary connector and includes

at least one optical fiber section having a front end with a front optical contact surface and a rear end with a rear optical contact surface, said optical fiber section being affixed in said channel of said fiber receiving sleeve by means of said clamping elements, and being positioned to establish, with said front optical contact surface, an optical connection to said complementary optical element of said complementary connector,

said front side of said fiber receiving sleeve being arranged adjacent to, and in the area of said front optical contact surface of said optical fiber section, and

wherein said clamping elements define a narrowing opening in said channel of said fiber receiving sleeve, longitudinally spaced from said front side of said fiber receiving sleeve and arranged with a set-back relative to said front optical contact surface such that said front end of said optical fiber section extends beyond said narrowing opening in said channel of said fiber receiving sleeve adjacent to said complementary optical terminal element of said complementary connector.

27. (New) The connector according to claim 26,

wherein said front side of said fiber receiving sleeve for said complementary optical terminal element of said complementary connector, forms a stop leaving a gap to said front optical contact surface of said optical fiber section.

28. (New) The connector according to claim 26,

wherein said channel of said fiber receiving sleeve is a substantially cylindrical fiber channel having said clamping elements protruding radially inwardly into said channel at said narrowing opening.

29. (New) The connector according to claim 26,

wherein said clamping elements are integrally formed with said walls of said fiber receiving sleeve.

30. (New) The connector according to claim 26,

wherein said clamping elements are formed to engage said optical fiber section in displacing and compressing some material of said optical fiber section.

31. (New) The connector according to claim 26,

wherein said clamping elements each comprise a front face adjacent to said front side of said fiber receiving sleeve, each said front face of said clamping elements being longitudinally spaced from said front side of said fiber receiving sleeve towards said rear side thereof.

32. (New) The connector according to claim 31,

wherein each said front face of said clamping elements is offset relative to said front side of said fiber receiving sleeve by more than 30 μm and less than 5 mm.

33. (New) The connector according to claim 26,

wherein said channel of said fiber receiving sleeve includes a front guide section having a first interior diameter and a rear insertion section having a second interior diameter, said second interior diameter being larger than said first interior diameter.

34. (New) The connector according to claim 33,

wherein a chamfer is provided between said front guide section and said rear insertion section.

35. (New) The connector according to claim 26,

wherein said fiber receiving sleeve includes a rear insertion section and a front guide section having an interior diameter for guiding said fiber section front end that has an exterior diameter, said interior diameter of the front guide section being between 40 μm smaller and 120 μm larger than said exterior diameter of said optical fiber section.

36. (New) The connector according to claim 33,

wherein said optical fiber section has a radial clearance of 40 μm to 100 μm in said rear insertion section of said fiber receiving sleeve.

37. (New) The connector according to claim 33,

wherein said clamping elements are located in said insertion section.

38. (New) The connector according to claim 33,

wherein said clamping elements are longitudinally spaced from said rear end of said front guide section in direction of said insertion section .

39. (New) The connector according to claim 26,

wherein at least three clamping elements are arranged in said channel, evenly

spaced around the circumference of said channel.

40. (New) The connector according to claim 39,

wherein said clamping elements are formed as engaging lugs.

41. (New) The connector according to claim 40,

wherein said engaging lugs have a substantially triangular cross section, seen in radial direction onto said optical fiber section.

42. (New) The connector according to claim 40,

wherein said engaging lugs each has a ramp surface inclined to said rear end of said fiber section and a front face that extends substantially perpendicularly to said optical axis of said optical terminal element.

43. (New) The connector according to claim 42,

wherein said engaging lugs each has a width in the range of 150 µm to 400 µm measured in circumference direction of said channel in said fiber receiving sleeve and a height of 50 µm to 200 µm measured in radial direction of said channel, each lug protruding radially inwardly of the channel .

44. (New) The connector according to claim 26 further comprising,

at least one electro-optical converter including an optical input/output, said converter being located at said rear end of said optical fiber section and said rear optical contact surface of said fiber section providing an optical connection between said fiber section and said converter.

45. (New) The connector according to claim 44,

wherein said electro-optical converter is mounted by a bracket directly to said rear side of said connector housing.

46. (New) The connector according to claim 45,

wherein said bracket is stamped from sheet metal, substantially U-shaped and interlocked on side surfaces of said connector housing, the bracket also being provided with soldering pins for connecting with a printed circuit board.

47. (New) The connector according to claim 45,

wherein said bracket comprises at least one elastic spring section, pressing said converter onto said rear optical contact surface of said fiber section when assembled.

48. (New) The connector according to claim 47,

wherein said bracket comprises a rear wall and an upper cover, integrally connected along a rear upper edge in one piece, said spring elastic section being

attached to said upper cover and said spring elastic section having a substantially L-shaped cross section.

49. (New) A method for manufacturing an optical connector including plastic fibers, in particular for manufacturing a multimedia-connector for a vehicle comprising the steps of:

a) providing a connector housing with a mating receptacle for mating connection with a complementary connector, wherein said connector has at least two optical terminal elements, for mating connection with mating optical terminal elements of said complementary connector and wherein each of said terminal elements has a fiber receiving sleeve, each with a front side and a rear side connected by a channel including a plurality of inner clamping elements that define a narrowing opening in said channel, said narrowing opening being longitudinally spaced from said front side of said fiber receiving sleeve,

b) providing at least two optical fiber sections each having a front end with a front optical contacting surface and a rear end with a rear optical contacting surface,

c) pressing said fiber sections directly into an associated one of said fiber receiving sleeves thus fixing said fiber sections by means of said clamping elements in said fiber receiving sleeves, such that said front end of said optical fiber section extends beyond said narrowing opening in said channel of said fiber receiving sleeve adjacent to said complementary optical terminal element of said complementary connector,

d) positioning at least two electro-optical converters in said connector housing with each a converter at said rear side of each associated fiber receiving sleeve,

whereby an optical connection between said fiber sections and said converters is established through rear optical contacting surfaces of said fiber sections, and

e) affixing said converters to said connector housing.

50. (New) The method according to claim 49,

wherein said fiber receiving sleeves each comprise a front stop surface in the area of a front optical contact surface of said optical fiber sections, also comprising the step of

f) pressing each a mounting die against an associated one of said front stop surfaces forming a front stop for the associated fiber section during step c).